

REMARKS

The Examiner is thanked for the Office Action of February 8, 2008. This request for reconsideration is intended to be fully responsive thereto.

AMENDMENTS

The claims 16 and 22 were amended to clarify the meanings of the claim and also to distinguish from the cited reference. No new matter has been added.

REJECTIONS UNDER 35 U.S.C. 102 (b)

The Examiner rejected claims 1-30 were rejected under 35 U.S.C. 102 (e) as being anticipated by US Patent Application Publication No. 2003/0074600 to 600 publication (600 publication hereinafter). The Examiner rejected claims 16-24 and 26-30 basically suggesting that 600 publication discloses every elements of the rejected claims. The Applicant respectfully disagrees.

600 publication discloses Data Backup and Recovery System while the present invention discloses Database Reorganizing System. Both applications are different inventions made based on/using USP6,415,375 (Information Storage and Retrieval System or '375 patent) which is the invention regarding the primary system. Both 600 publication and the present invention use the primary system of '375 patent where 600 publication is the backup and recovery system using the primary system and the present invention is reorganizing system for the primary system.

600 publication is invented specifically for recovering the data missing trouble and data failure. 600 publication uses the secondary system to accomplish the objects, where the secondary is logically the same as the primary system, i.e., having a location table, block, alternate key location table, and alternate key block. The primary system data is copied in the secondary system, and when any modification occurs to the primary system data (i.e., location table, block, alternate key location table, and alternate key block), that modification is transmitted to the secondary system. The secondary system modifies the data based on A log. Accordingly, 600 publication always has the primary system and the secondary system to perform the backup and recovery system. For recovering the data failure, in addition to the above-A log, pre-modified data, as B log, is transmitted from the primary system to and stored in the secondary system. The database can go back to the point when the data failure occurs by reverse-sequentially fixing the data by B log. The secondary system can be located in a different place from the primary system for the crisis management and therefore can work in a synchronous mode or an asynchronous mode.

The present invention is invented for reorganizing the database system. The reorganization becomes necessary because of the fragmentation in the database caused due to data addition, deletion, and modification. The fragmentation considerably slows the database system down. Therefore, the object of the present invention is to eliminate the overflow block and fragmentation and to adjust the activity ratio within the blocks. According to the present invention, a new location table is created in the primary system, and a reorganization pointer is placed in each the current location table and new location table. The location table entry points the top of the primary block, and the reorganization is performed from the top of the location table entry. If there is an overflow block, the

overflow block becomes the primary block, and the entry is added in the new location table.

A progress of the reorganization process is indicated by the reorganization pointer. Accordingly, the present invention does not require the secondary system. The present invention can operate the reorganization process in the database system that uses 600 publication's data backup/recovery system, i.e., the database system with the primary and secondary systems.

As explained above, 600 publication relates to backup recovery system and the present invention relates to data reorganization system. They are structurally and functionally two different technologies. 600 publication does not disclose, teach or suggest an idea of reorganizing the fragmentized database system. Claims 16 and 22, so that Claim 16 reads

"A database reorganization system, comprising
data records for holding data entries, each data record ~~contain~~
containing a primary key; and
primary blocks for storing data records in the order of the primary
keys thereof;
overflow blocks linked to the primary blocks[:]], wherein said
database reorganization system further comprising:
a current location table and a new location table for containing in
contiguous regions entries describing the addresses of the primary
blocks;
a current location table reorganization pointer that indicates

through which entry in the current location table reorganization has completed;

a new location table reorganization pointer that indicates through which entry in the new location table reorganization has completed; and

a current location table final pointer that indicates the final position used by that said location table."

The currently amended Claim 16 clarifies the characteristics of the present invention, i.e., the current location table and the new location table, the current location table reorganization pointer, the new location table reorganization pointer, and the current location table final pointer. The Applicant reviewed and checked all paragraphs that the Examiner suggested in the office action; however, none of these features and limitations are disclosed or suggested by 600 publication. The same argument can be made regarding the currently amended Claim 22.

Conclusion

Because of the above-identified and fully discussed differences, it is respectfully submitted Claims 16-19 and 21-26 are now in condition for allowance and notice to that effect is respectfully requested.

Should the Examiner believe further discussion regarding the above claim language would expedite prosecution they are invited to contact the undersigned at the number listed below.

/Tracy M Heims/
Tracy M Heims
Reg. # 53,010

Apex Juris, pllc
12733 Lake City Way Northeast
Seattle, Washington 98125
Phone: 206-664-0314
Fax: 206-664-0329
Email: usa@apexjuris.com